DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018607 Address: 333 Burma Road **Date Inspected:** 13-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Segment

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

OBG # BAY 1

This QA Inspector performed dimensional survey inspection on the traveler rail to verify the thickness of flange, flange width, web to flange offset, rail length, rail sweep, depth between the flanges and flange tilt using vernier caliper, measuring tape, right angle and string line. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The traveler rail designation is as follows:

20TR2-045

OBG # TRIAL ASSEMBLY YARD (11EE-12AE)

This QA Inspector along with QA Inspector Mr. Manjunath S Math performed dimensional joint survey inspection on the WT stiffeners to verify the horizontal and vertical offset using 1000mm straight edge and bridge cam gauge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11EE to Segment 12AE – PP 108 to PP 109

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (11EW-12AW)

The QA Inspector observed the heat straightening operation on longitudinal diaphragm. The location was the web and flange of longitudinal diaphragm of segment 12AW at work point W3. The heat straightening was performed against heat straightening report HSR1 (B)-9952 Rev.0. The heat straightening operation appeared to be in general compliance with the contract specifications.

The QA Inspector observed the heat straightening operation on longitudinal diaphragm. The location was the web and flange of longitudinal diaphragm of segment 11EW at work point W3. The heat straightening was performed against heat straightening report HSR1 (B)-9948 Rev.0. The heat straightening operation appeared to be in general compliance with the contract specifications.

OBG # TRIAL ASSEMBLY YARD (12AE-12BE)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 001 in the (1G) flat position on bottom panel piece mark no. OBE12B. The location was the transverse splice weld joining segment 12AE and 12BE at work point E4 to E3. The welder ID was 047353. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231T-ESAB.

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 001 in the (1G) flat position on bottom panel piece mark no. OBE12B. The location was the transverse splice weld joining segment 12AE and 12BE at work point E4 to E3. The welder ID was 040458. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231T-ESAB.

OBG # TRIAL ASSEMBLY YARD (11CW-11DW)

The QA Inspector observed ZPMC personnel performing the turn-of- nut bolting operation on U-rib splice. The location was the U-rib splice joining segment 11CW and 11DW. The bolting operation appeared to be in general compliance with the contract specifications.

For additional information please reference the pictures below:



WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Manikandan, Murugan	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer